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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/225,486	01/06/1999	MITSUHIRO UCHIDA	Q52871	2417

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EXAMINER	
HANNETT, JAMES M	

ART UNIT	PAPER NUMBER
2612	18

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/225,486	UCHIDA ET AL.	
	Examiner	Art Unit	
	James M Hannett	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,3,10,13,15 and 17-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2, 3, 10, 13, 15 and 17-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed as for the arguments pertaining to Claims 2, 3 and 15-18 have been fully considered but they are not persuasive.

The applicant argues that Terashita does not teach that the image processing is carried out by weighting the averages by using predetermined weight coefficients. The applicant alleges that the examiner has combined the teachings of different embodiments to reject the limitation as stated above. The examiner disagrees with the applicants argument. The examiner does not believe that different embodiments have been improperly combined. Terashiuta refers to different aspect of the invention and not different embodiments. It is clear from the specification of Terashita that the different aspect of the invention are used in combination to teach that the image processing is carried out by weighting the averages by using predetermined weight coefficients.

As for the argument that a reduced resolution image that is created by dividing image data into 8X8 blocks of data and averaging the 8X8 blocks to obtain single values for each block does not constitute the generation of a thumbnail image. The applicant has simply stated that this does not constitute a thumbnail image and has given no evidence that it does not constitute a thumbnail image. As for the argument that Claim 15 requires the thumbnail image to be derived from image signals, in turn derived from a plurality of images. The examiner has viewed the digital image signals to be the signals for each pixel or each 8X8 block of pixels. Claim 15 states that the characteristic value is extracted from a thumbnail image signal of the digital image signals. It is viewed by the examiner that the thumbnail image does not require a composite

image of several images. The examiner views the claim to read that the thumbnail image is composed of a plurality of digital image signals which are viewed as the different pixels of the thumbnail image.

Applicant's arguments, see Amendment, filed 1/12/2004, with respect to the rejection(s)of claim(s) 10, 19 and 20 under Saito have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Terashita.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1: Claims 15, and 17, are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,568,194 Abe.

2: In regards to Claim 15, Abe teaches in the abstract an image processing method for carrying out white balance (image processing) on a digital image signal. Abe teaches the use of extracting the luminance signal from digital image signals from two images of subjects photographed by a digital camera. Abe further teaches the use of carrying out image processing according to the luminance value on the digital image signals to perform a white balance adjustment. Abe teaches in the abstract the use of extracting the luminance signal from digital image signals from two images of subjects photographed by a digital camera. Abe teaches on Column 3, Lines 25-44 that the luminance signal is extracted from an image wherein pixel data

from an original image is divided into N blocks, each of which is composed of an 8X8 matrix of pixels. This block conversion circuit creates a thumbnail image. Therefore, the extraction of the characteristic value is extracted from a thumbnail image. The examiner has viewed the digital image signals to be the signals for each pixel or each 8X8 block of pixels. It is viewed by the examiner that the thumbnail image does not require a composite image of several images. The examiner views the claim to read that the thumbnail image is composed of a plurality of digital image signals which are viewed as the different pixels of the thumbnail image.

3: As for Claim 17, Abe teaches in the abstract the use of recording means or memory for recording the digital image signals to memory.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4: Claims 2, 3, 19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 5,767,983 Terashita.

5: As for Claim 2, Terashita teaches on Column 4, Lines 12-33 an image processing method for carrying out image processing on a digital image signal. Terashita teaches the method of extracting film characteristic data from image signals from a plurality of image frames. Terashita further teaches the use of carrying out image processing according to the characteristic value on

the digital image signals. Terashita teaches on Column 7, Lines 15-66 and on Column 10, Lines 26-39 that when each of the digital image signals is composed of RGB color signals, the characteristic data is a total average of averages of the digital image signals. Terashita further teaches the method of converting RGB color signals in a digital image signal representing an image of a gray subject to be equalized, based on the total average. Terashita teaches on Column 3, Lines 5-21 an image processing method wherein an average density is multiplied by a weighting factor. Terashita teaches on Column 7, Lines 6-16 that the weight-factors can be set predetermined weighting coefficients.

6: In regards to Claim 3, Terashita teaches on Column 16, Lines 6-22 that when the digital image signals are composed of RGB color signals, photometric data for each color signal in each pixel in each of the digital image signals is calculated. Terashita teaches on Column 24, Lines 6-20 that weighting coefficients can be set respectively to characteristic data which is data from the photometric data.

7: As for Claim 19, Terashita teaches on Column 4, Lines 12-33 an image processing method for carrying out image processing on a digital image signal. Terashita teaches the method of extracting film characteristic data from image signals from a plurality of image frames. Terashita further teaches the use of carrying out image processing according to the characteristic value on the digital image signals.

8: As For Claim 20, Terashita teaches on Column 4, Lines 12-33 an image processing method for carrying out image processing on a digital image signal. Terashita teaches the method of extracting film characteristic data from image signals from a plurality of image frames. Terashita further teaches the use of carrying out image processing according to the characteristic

value on the digital image signals. Terashita teaches on Column 7, Lines 15-66 and on Column 10, Lines 26-39 that when each of the digital image signals is composed of RGB color signals, the characteristic data is a total average of averages of the digital image signals. It is viewed by the examiner that the total average of the average of all three of the color signals into a single color signal represents the brightness of the pixels.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9: Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,568,194 Abe in view of USPN 5,682,573 Ishikawa et al.

10: As for Claim 18, Abe teaches the claimed invention as discussed in Claim 17, Abe does not teach the use of recording a flag indicating whether or not the digital image signal has been corrected after photographing in the recording medium together with the digital image signal. Abe further does not teach the method of extracting the characteristic value and performing image processing only on signals having the flag.

Ishikawa et al teaches on Column 20, Lines 35-51 a correcting operation wherein a flag indicating whether or not a digital image signal has been corrected after photographing in the recording medium together with the digital image signal. Ishikawa et al further teaches the method of extracting the characteristic value and performing image processing only on signals having the flag present.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add the flag indicating method of Ishikawa et al to the signal processing method of Abe in order to allow the method of extracting the characteristic value and performing image processing only on signals having the flag present.

11: Claims 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,767,983 Terashita in view of USPN 5,010,393 Saito.

12: In regards to Claim 10, Terashita teaches on Column 4, Lines 12-33 an image processing method for carrying out image processing on a digital image signal. Terashita teaches the method of extracting film characteristic data from image signals from a plurality of image frames. Terashita further teaches the use of carrying out image processing according to the characteristic value on the digital image signals. Terashita teaches on Column 16, Lines 6-22 that when the digital image signals are composed of RGB color signals, photometric data for each color signal in each pixel in each of the digital image signals is calculated. Terashita teaches on Column 16, Lines 46-55 a that the characteristic value can be a value of the photometric data relative to the tricolor average of the signals. Terashita further teaches that a table value prepared from the sets of photometric data may be used. Terashita does not teach that the characteristic value is a value regarding chroma or color saturation of each of the digital image signals.

Saito teaches on Column 1, Lines 53-68 the use of an image processing method of performing image processing on a digital signal from images taken from a digital camera. Saito teaches the use of extracting a characteristic value which is chroma information corresponding to the ratio of high-chroma colors from digital image signals obtained by photographing an object. Saito further teaches that this process provides a chroma adjusting method, therefore, carrying

out image processing according to the chroma information from the digital signals. Saito teaches on Column 1, Lines 53-68 the use of extracting a characteristic value which is chroma information corresponding to the ratio of high-chroma colors from digital image signals obtained by photographing an object. Saito further teaches the method of converting the chroma of the digital image signal, based on the extracted chroma information. Saito teaches that it is advantageous to perform this signal processing method on image signals because it improves image quality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the image copying apparatus of Terashita to perform the image processing method of Saito in order to provide a chroma adjusting method, therefore, carrying out image processing according to the chroma information from the digital signals and therefore improve image quality.

13: In regards to Claim 13, Terashita teaches on Column 40, Lines 30-37 that it is preferred the characteristic value is found based on the digital image signal from which high saturation pixels have been eliminated.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure USPN 6,324,345 Enomoto; US 2001/0009438 Kihara et al; USPN 5,917,578 Nakamura teaches the use of extracting information related to a type of camera, lens and film from the image recorded on a photographic film.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hannett whose telephone number is 703-305-7880. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett
Examiner
Art Unit 2612

JMH
March 15, 2004

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